

United States Department of Agriculture

Animal and Plant Health Inspection Service

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The Brown Tree Snake

The brown tree snake (Boiga irregularis), a native of Australia, Papua New Guinea, and the Solomon Islands, is a dangerous threat to the economy and ecology of Guam and is the subject of a cooperative program to prevent its spread throughout the Pacific Rim.

The brown tree snake was accidentally introduced to Guam in the late 1940's or early 1950's, probably from the Admiralty Islands in the Solomon complex. The only other snake on Guam is the blind snake (Ramphotyphlops braminus). It resembles a worm in size and shape and is harmless.

Biology

Brown tree snakes are about 15 inches at hatching and may reach 10 feet in length as adults. Most brown tree snakes are 3 to 4 feet long. This snake is a rear-fanged semiconstrictor and is mildly poisonous. Both constriction and venom are used to help immobilize prey.

The snake's venom trickles into a bite victim along grooves in the rear fangs. Because of the relatively small size and position of the fangs, a brown tree snake must chew to allow the fangs to penetrate the skin.

The brown tree snake will readily strike when aggravated, but it does not present a danger to adults. A bite from this snake will not penetrate most clothing. However, babies less than 6 months old may be at risk from both brown tree snake bites and constriction. A young victim of a brown tree snake bite should receive immediate medical attention.

The snake is active at night and lives in trees. It spends most days coiled in a cool and dark location, such as a treetop or a rotted log. Brown tree snakes are adept climbers and can crawl through very small openings.

Damage

The brown tree snake has caused extensive economic and ecologic damage to Guam. It is

responsible for numerous power outages across the island each year. This species is an opportunistic feeder and has exterminated most of Guam's native forest birds.

As the bird population has declined, the snake has turned its focus on Guam's lizards. Rats, mice, domestic birds, and bird eggs make up the rest of the snake's diet on Guam. In the snake's native range, its populations are kept in check by natural processes such as disease, competition for food, and predation. Although these processes occur on Guam, they do not control snake populations effectively there.

The snake is extremely abundant on Guam, with localized estimates sometimes reaching 50 or more snakes per hectare of jungle. These population density estimates are among the highest snake densities ever recorded. An estimated 1 to 3 million brown tree snakes inhabit Guam.

Conflicts With People

Even though the snake is abundant on Guam, most people rarely, if ever, encounter a live brown tree snake. These pests do not hang from trees in giant bunches, nor do they actively search out people to bite.

The snake may occasionally enter buildings while searching for food. Snakes may be attracted to residential areas by an abundance of rodents and lizards.

Simple precautions, such as keeping doors and screens secured, screening air ducts and pipes that open outdoors, and keeping garbage and pet food in secured containers may make a building less attractive to brown tree snakes.

If you encounter a brown tree snake indoors, the preferred alternative is to call local authorities for removal. But if you must handle a snake, it can be safely captured by stepping on it and grabbing it directly behind the head.

Preventing Its Spread

The problems caused by the brown tree snake could spread to other Pacific islands and the mainland United States if snake dispersal is not prevented.

The snake has been sighted in Hawaii, Rota, and mainland United States and is believed to have arrived through cargo transported by ships or planes originating in Guam. Although no established snake populations are suspected at these locations, there is the possibility of an incipient population on Saipan. These sightings clearly demonstrate the possibility of snakes being transported to vulnerable locations.

The Federal Government's wildlife damage control program, administered by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), coordinates operational efforts on Guam aimed at keeping the snake from reaching other destinations. APHIS' Wildlife Services personnel use snake trapping in high-risk areas, trained snake-detector dogs in cargo, nighttime spotlight searches, and public education as tools to achieve this goal.

When leaving Guam, you can help ensure the snake does not leave with you by carefully inspecting your belongings, particularly outdoor goods, when packing.